Construction Advisory

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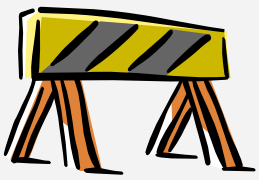

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So Your Contractor Needs an Earth Change Plan . . .

This advisory provides additional guidance on the need for and format of a contractor's earth change plan (ECP). ECP is another term for a soil erosion and sedimentation control (SESC) plan and is generally used to differentiate between the contractor's plan and the SESC measures on the plans.

During SESC design, only the areas within the limits of earth disturbance are addressed. The designer will generally include miscellaneous quantities of SESC pay items. If the engineer determines it is necessary to expand the disturbed areas during construction, the miscellaneous quantities can be used to ensure these areas are protected from the effects of soil erosion and sedimentation and an ECP is not necessary. The added measures are installed and maintained as if they were detailed on the plans. It is good practice to document the use of these added items on Form 1126 when the SESC/NPDES inspections are conducted.

The ECP only applies if the contractor chooses to disturb the area between the plan limits of earth disturbance and the right-of-way. Refer to the *SESC Manual* for more details on when the ECP is required and an example of an acceptable plan. It is good practice to discuss if and when an ECP is necessary at the preconstruction meeting. An ECP must be on file prior to the start of activities including clearing and vehicle or equipment movements that remove the protective vegetation and expose soil to accelerated erosion.

The contractor can use a copy of the project plan sheet, or a hand drawn plan, in combination with a short narrative to prepare the ECP. The ECP must state when the measures will be installed, how they will be maintained, and how the area will be permanently stabilized. This can be covered by a general statement that they will be installed prior to any earth disturbance in the area covered by the plan and that installation, maintenance, removal and permanent stabilization will follow the SESC Manual and the standard specifications.

The plan must indicate the direction of surface water flow across the area and relative slope of the area (flat, slopes to the west, etc), as this determines the adequacy of the SESC measures proposed. The timing and sequence of the earth disturbing activities in the area and the plan for maintaining the measures can be covered in a few notes on the ECP. The limits of the earth disturbance, and the description and location of the SESC measures, are the most important elements and must be shown in detail.

Common ECP errors include:

- Gaps between SESC measures on MDOT's plan and the contractor's
- Drainage routes including ditches, berms, and sheet flow not shown
- Disturbed area extends beyond that shown on the ECP
- Failure to use the E&S keying system to show measures
- Not enough detail to ensure adequate controls
- Duration of disturbance in area not addressed

Keep the contractor's ECP in the project file and have it available when conducting the SESC/NPDES inspection to be sure it is being followed. Do not hesitate to request additional SESC measures when needed for adequate protection. If DEQ conducts a field review of your project, point out areas that are covered by the contractor's ECP rather than in the MDOT plans, and have the ECP available for their review.